

REMARKS

Status of the claims:

Claims 1-13 are pending and ready for further action on the merits. Reconsideration is respectfully requested in light of the following remarks.

Rejections under 35 USC §§102/103

Claims 1 and 3 are rejected under 35 USC §102(b) as being anticipated by Ota '008 (JP 06-57008).

Claims 2 and 10-12 are rejected under 35 USC §102(b) as being anticipated by or alternatively under 35 USC §103(a) as being unpatentable over Ota '008.

These rejections are traversed for the following reasons.

The Examiner asserts that Ota '008 discloses a process for producing a resin composition in which components "A" and "B" are fed to an extruder which "melt kneads" and in which component "C" is melt kneaded in a side feeder.

However, Applicants believe that this interpretation by the Examiner is erroneous. In Ota '008, "feeder" refers to equipment for conveying a polymer powder or pellets and does not refer to melt kneading. While the Examiner notes that, citing page 14 lines 6-9 of Ota '008, component "C" is supplied from the side feeder (where the Examiner asserts it has been melted) to the "main body of the extruder from the side feeder",

Applicants submit that there is nothing to support the Examiner's assertion that component "C" has been melted in the side feeder.

At page 14, lines 6-9 of Ota '008, it is described that component "C" is supplied to the side feeder from the capacity feeder or weight feeder and supplied to the main body of the extruder from the side feeder.

Applicants believe that the Examiner believes that component "C" is melt-kneaded from the sentence that bridges pages 13 and 14. This sentence notes "and melt-kneads the component (C) by the side feeder". However, Applicants respectfully point out that the meaning of this sentence is "and melt-kneads the component (C) fed into the above-mentioned extruder by the side feeder". This can be inferred by the following sentence, which says that "so that a resin composition is manufactured by only one cycle of melt-kneading".

If component "C" is melt-kneaded in the side feeder as asserted by the Examiner, one cycle of melt-kneading can not be achieved since melt-kneaded component "C" would already be melt-kneaded prior to mixture with components A and B. Component "C" would then have to undergo a second cycle of melt-kneading to make the composition containing components A, B, and C.

Furthermore, the first sentence of paragraph 20 on page 13 should be reasonably read to state, "the extruder being used in

the present invention is an extruder that is provided with two or more feeders such as main feeder and a side feeder and the extruder enables melt kneading". Thus, Applicants submit there is no reason to read this as a side feeder that enables melt kneading.

Moreover, the first sentence of paragraph 21 at page 13 says "the side feeder being used in the present invention may be the vertical type or the horizontal type". It is impossible to perform melt-kneading in a vertical type extruder. Accordingly, because Ota '008 teaches the equivalence of a vertical type or horizontal type side feeder, one of ordinary skill in the art (in assuming that these extruders are equivalent) would never assume that melt-kneading was performed in the side feeder.

One of ordinary skill in the art, in reading this passage, would surmise that the side-feeder disclosed by Ota '008 is equipment that is used to merely feed or convey the polymer to an extruder. In other words, the method taught by Ota '008 is vastly different from the present invention.

For the above reasons, Applicants submit that Ota '008 cannot anticipate, nor can it render obvious the instantly claimed invention. Withdrawal of the rejection is warranted and respectfully requested.

Rejections under 35 USC §103

Claims 4 and 12 are rejected under 35 USC §103(a) as being unpatentable over Ota '008 in view of Fenton '244 (US Patent No. 4,584,244).

This rejection is traversed for the following reasons.

Present Invention

The present invention, as recited in claim 1, relates to a method of producing a composition comprising a thermoplastic resin and a rubber, wherein a solid rubber is turned into a molten rubber by a rubber kneading machine and the molten rubber is fed into an extruder from the rubber kneading machine, and in the extruder the molten rubber is melt-kneaded with the thermoplastic resin.

Disclosure of Ota '008

Ota '008 discloses a resin composition said to be excellent in thermal stability and dispersibility. The resin is made by melt-kneading a polyphenylene ether resin with a polyolefin resin by the use of an extruder and subsequently further melt-kneading the first kneaded product with a specific copolymer by the use of a side feeder.

The resin composition comprises (A) 40-94 parts by weight of a polyphenylene ether resin [preferably poly(2,6-dimethyl-

1,4-phenylene ether)] or the polyphenylene ether resin containing a polystyrene resin, (B) 2-20 parts by weight of a polyolefin resin having a number-average MW of 30000 or higher (preferably ethylene/propylene copolymer or low density polyethylene), and (C) 4-40 parts by weight of a vinylic aromatic compound-conjugated dienic compound copolymer (preferably styrene-butadiene copolymer), and/or the hydrogenation product of the copolymer. Components A and B are melt-kneaded with each other by the use of an extruder equipped with a side feeder and subsequently further melt-kneaded with component C to produce a resin composition said to be excellent in thermal stability and in the dispersibility of the component B.

Disclosure of Fenton '244

Fenton '244 discloses free-flowing, reagglomeration-resistant powders that are prepared by utilizing finely divided polymer particles coated with alumina. The alumina-coated polymer powder are said to exhibit cold-flow reagglomeration-resistance behavior and, when added to solvents specific for the alumina-coated polymer, are said to dissolve very rapidly.

Removal of the Rejection over Ota '008 in view of Fenton '244

Claim 4 is dependent from claim 1 and claim 12 is dependent from claim 10. Ota '008 fails to disclose or suggest feeding an extruder with molten rubber as is claimed in claims 1 and 10. Please see the arguments advanced above regarding Ota '008. Fenton '244 fails to disclose or suggest any rubber melt or any extruder.

Accordingly, Applicants assert that the Examiner has failed to make out a *prima facie* case of obviousness with regard to the 35 USC §103(a) rejection over Ota '008 in view of Fenton '244. Three criteria must be met to make out a *prima facie* case of obviousness.

- 1) There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.
- 2) There must be a reasonable expectation of success.
- 3) The prior art reference (or references when combined) must teach or suggest all the claim limitations.

See MPEP §2142 and *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991). In particular, the Examiner has failed to meet the third element to make a *prima facie* obviousness rejection. Neither Ota '008 nor Fenton '244 disclose or suggest feeding an extruder with

molten rubber. Thus, for this reason alone, the rejection is inapposite. Withdrawal of the rejection is warranted and respectfully requested.

Allowable Subject Matter

Applicants would like to thank the Examiner for acknowledging that claims 5 and 13 are allowable.

Conclusion

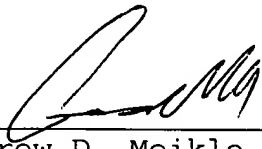
With the above remarks, it is believed that the claims, as they now stand, define patentable subject matter such that passage of the instant invention to allowance is warranted. A Notice to that effect is earnestly solicited.

If any questions remain regarding the above matters, please contact Applicant's representative, T. Benjamin Schroeder (Reg. No. 50,990), in the Washington metropolitan area at the phone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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